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ABSTRACT

The concept of accountability in education has two primary concerns: the responsibility to provide effective educational programs and the responsibility to employ efficiently the resources allocated for this purpose. These concerns are fundamental to an evaluation procedure based on the principle of accountability. The establishment in 1967 of new Federal programs in Bilingual Education and Dropout Prevention provided the vehicle for an effort to establish accountability principles. Ten critical factors of program design, operation and management which could expand the dimensions of accountability were identified: community involvement, technical assistance, needs assessment, management systems, performance objectives, performance contracting, staff development, comprehensive evaluation, cost-effectiveness, and program audit. Their implications for program evaluation are discussed. (PR)

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IMPLICATIONS OF ACCOUNTABILITY FOR EDUCATIONAL PROGRAM EVALUATION

W. Stanley Kruger

The concept of accountability in education, from our point of view, has two primary concerns: the responsibility of the Educational Enterprise to provide programs which will effectively develop the human potential of a wide variety of client groups within a diversity of service communities; and, the responsibility of the Enterprise to efficiently utilize the various resources entrusted to it by the supporting society. The concept emphasizes optimal attainment of objectives in both these areas of concern, and maximization of the desired relationship between them.

An "Impossible Dream"? We think not; although some dreaming is involved, because some planning is involved. Because some planning is involved, some evaluation is involved - and it must be evaluation with a mission.

As the complexities of modern society generate new demands upon Education, they also generate new demands upon other social services, increasing the competition for resources in the public sector. Thus, events transpiring in the real world and attitudes of the public mind combine to stress greater attention to the necessity and value of public education, and a parallel attention to the necessity for increased implementation of principles of accountability in the conduct of educational programs.

It is not sufficient merely to take notice of a need for accountability, or to exhort its virtues. Deliberate, systematic, and consistent procedures for development, implementation, evaluation, and refinement must be vigorously pursued. The tenets of the concept permit nothing less from those who would embrace it.

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Most Federal programs in education support projects which are intended to ameliorate and resolve critical problems in the field. If this undertaking is to be realized, the design, operation, and management of these projects must incorporate specific policies and procedures directed toward the attainment of accountability objectives; not only for the direct effect on critical-problem solution, but also for the indirect effect of generation of support for continued efforts in critical-problem areas. In the process, we need also to demonstrate techniques with high potential for the renovation and renewal of traditional program areas, and facilitating systems. Nowhere is this need greater than in the major urban complexes of our Nation.

With the passage of the 1967 amendments to the Elementary and Secondary Education Act of 1965, two new Federal programs were established; to support projects in the areas of Bilingual Education (Title VII) and Dropout Prevention (Title VIII - Section 807). At the time that basic program regulations, manuals, and related materials were being prepared, it was decided that these programs provided an appropriate vehicle for a concerted effort to establish accountability principles in the administration of Federally-supported projects in elementary and secondary education, through a focus upon specific aspects of project design and management. The new programs would permit Office of Education staff members to apply, from the beginning, many lessons learned in the administration of other Federal programs; particularly from the experience of Title III (Supplementary Centers and Services). This component of the Elementary and Secondary Education Act, despite its great potential, has been unable to effectively demonstrate its accomplishments to the degree necessary to sustain continuing financial support at growth levels.

Although accountability in Federal education programs is still very much in the developmental stage, the intensity of interest and effort is accelerating. The Commissioner of Education's operational objectives for Fiscal Year 1971, call for accountability concepts to be installed in ten discretionary-fund programs and five State-plan programs by June 30, 1971. Plans are now being implemented which will augment the efforts of what has heretofore been an extremely small staff effort devoted to theory-building, policy-and-procedure formulation, materials development, and staff training. Proposals are now being solicited, preparatory to contracts being let, which will assist in the refinement of conceptual elements and the production of program and instructional materials for use by headquarters, regional office, State-agency, and local-educational-agency personnel in disseminating and installing accountability concepts in identified programs.

It should be clear that we are considering a particular type of educational accountability - program accountability. That is, the responsibility of program personnel, whether in a small grant project, a local-school-system curriculum area, an entire local school system, a State school system, a Federal program, the U.S. Office of Education, or the entire Federal educational effort - to produce an optimum level of results with the resources available to them. Subsumed in this consideration of program accountability are other accountability considerations current in the educational literature; such as "research accountability", "instructional accountability", and "fiscal accountability", each of which has particular implications for certain critical factors in program accountability. The focus we would hope to realize, however, is upon the <u>performance</u> of specific, rather complex, organizations with specific, rather complex, responsibilities.

It is incumbent upon us, of course, to move beyond concept definition, statement of purpose, and justification of need. What are the critical factors of program design, operation, and management which must receive particular attention if greater dimensions of accountability are to materialize? We have identified twelve: community involvement, technical assistance, needs assessment, change strategies, management systems, performance objectives, performance or program budgeting, performance contracting, staff development, comprehensive evaluation, cost effectiveness, and program auditing. Of these twelve factors, at least ten are significant in their implications for educational program evaluators. Let us quickly review these ten factors:

- First, <u>community involvement</u>. A minimum base of community support must be ascertained before the commencement of any significant program activities. Beyond this, program personnel should explore every possibility to involve members of appropriate concerned community groups in program planning, operation, and evaluation. This involvement should include participation in policy determination and in such procedural activities as technical-skill levels may warrant. A commitment to accountability, then, requires early involvement of program evaluators, to assess initial and continuing degrees of community-support, and to assess community-personnel capabilities in relation to program skill-requirements. The latter activity, in fact, becomes, on a broader scale, an essential element of another accountability factor, that of -

- <u>technical assistance</u>. Early in the planning of program activities, the planning staff should undertake a "capability survey". This survey consists of setting down the major program objectives, activities, and functions and assessing existing system capabilities to accomplish them. Where capabilities do not exist, they must be acquired, either as permanent system

additions or on a technical-assistance, consultant or performance-contract, basis. Program evaluators' skills are needed in the assessment of existing capabilities in a number of task areas, most particularly to assess the existing capability to undertake and complete the assessment and comprehensive evaluation necessary to determine program objectives, the extent of program-objectives realization, and the levels of performance efficiency.

- In needs assessment, assuming that basic assessment capability has been determined or acquired, early planning activities will include a basic assessment of target-group (client) and situational factors, leading to the establishment of task objectives and strategy goals designed to meet needs in the respective areas. This activity takes place, of course, in a climate of existing value systems and policies which may also require review in the total needs-assessment process. The acquisition of basic decision-making data in this phase of program planning is extremely critical, and will demand the skill and resourcefulness of able evaluation personnel.

- Next we determine appropriate management systems. A variety of program design and management techniques have been developed in business and industry which are now being adapted for use in the educational field. These techniques include Program Evaluation and Review Techniques, Critical Path Method, Program Planning and Budgeting Systems, Management By Objectives, etc. Most deal with resource allocation of time, personnel, and funds, in relation to specified elements of the primary tasks to be accomplished through program activities. The decision to employ any of these systems dictates certain functions, arrangements, and resource requirements for program evaluation and, thus, involvement for program evaluators. Within the schema of the selected management systems, program planning proceeds to the specification of -

- performance objectives. The keystone of program accountability is the statement of program objectives in performance terms, to include the nature of performance expected, the direction or level of performance accomplishment expected, the units of performance measurement and means of accomplishing the measurement, and the primary conditions under which performance is expected to be conducted. Objectives must be specified for each program component, activity or function; by target-group (client); and, in immediate to long-range classification. Assistance to program staff in framing performance objectives in measurable terms is a primary program evaluator function.

- Now, performance contracting. Where the decision has been made to add program capability by other than permanent system additions (the most desirable procedure, where feasible) for continuing program activities or functions, the addition should be through performance contracting. The emphasis in performance contracting is not on traditional input factors (i.e., dollars to be spent, man-hours to be committed, supplies and equipment to be consumed), but, instead, on output factors - the product element obtained upon realization of performance objectives set forth and accepted by the contractor as the condition for compensation. The skills of the evaluator, again, are needed to assist in the structuring of performance specifications, to assure that they are, in fact, stated in significant, valid, measurable terms. Beyond this, the evaluator will be called upon to provide the data necessary to determine the potential of proposed services, in relation to the potentials of alternative services which might accomplish the defined objectives, including the potential of existing or traditional services being utilized by the system. Finally, the program evaluator must determine if and when performance specifications have been met, so that compensation can be made.

- A standard but important factor in accountability is that of staff development. Increased staff competency is essential to progress toward the achievement of objectives. Staff development which should involve program evaluators may be conducted in a wide variety of areas: the standards for writing performance objectives, the techniques for gathering data, the bases for interpreting evaluation reports - to cite a few.

- Next we examine in more detail the accountability factor of comprehensive evaluation. This is, of course, the accountability factor of primary concern to program evaluators, and a primary concern for many of us who work in the administration of Federal programs. The 1967 Miller report on the first-year Title III proposals found evaluation to be the weakest element in the proposals. The 1968 report of the Second National Study of PACE found, in a review of 94 planning projects, that, "only 30 .... were judged as having adequate evaluation procedures in the project design ... contrasted to 31 projects which gave no evidence whatsoever of evaluation procedures." Of 43 operational projects, "a little over eight percent of the projects had made plans and promised to be adequate for evaluation of their projects; about 70 percent ... had done a little, and about 13 percent had not bothered with evaluation at all."

From our own work with Federal programs, we can only conclude that the typical Federally-supported project has an evaluation process that is: unplanned, partial, incompetent, uncoordinated, remote, terminal, narrow in perspective, and underfunded. Project evaluation has largely been an intuitive process conducted by key project staff on an expediency basis. While this may have sufficed, in many instances, to maintain project operations at the minimum level necessary to assure continued receipt of Federal funding,

it provided little of the substance needed for: (1) accomplishing analyses of program effectiveness or impact, cost-benefit relationships, or cost-effectiveness comparisons; (2) creating an impetus for systemic change; or (3) disseminating and otherwise promoting the adoption of innovative practices.

Who is responsible for the status quo, which someone has defined as "the mess we're in"? Many share the blame. Ultimately, for Federally-supported projects, the responsibility rests with the Federal program administrators who permit the funding of poorly-designed projects, or who permit them to continue under conditions of indeterminate effectiveness. We are the ones who have produced the program manuals which, at worst, have made no mention of evaluation at all, or which, at best, call for applicants to:

> "A. Where applicable, describe the methods, techniques and procedures which will be used to determine the degree to which the objectives of the proposed program are achieved.
>
> B. Describe the instruments to be used to conduct the evaluation.
>
> C. Provide a separate estimate of costs for evaluation purposes. This amount should be included in the proposed budget summary."

Instructions like the ones just quoted provide little guidance for the development of an adequate evaluation plan. Then we have compounded the problem in its initial states, in some instances, by permitting proposal evaluation-plan review, project negotiation, and project monitoring to become the sole responsibility of staff who have extreme difficulty in distinguishing validity from reliability, and who may associate a "Bell curve" with the styling of a Princess telephone.

If our own concern for accountability is legitimate; then, what is being done to improve what has been a situation of extreme delinquency?

First, we are emphasizing the necessity for completion of an evaluation plan prior to the commencement of project operations. The plan is to have adequate scope; to be based upon the specification of performance objectives for all basic program activities. For these performance objectives, the plan is to indicate key factors and responsibilities associated with measurement techniques and instruments, data collection, data analysis, reporting, and dissemination. Key evaluation-process events are to be posted to an evaluation plan "time-line" preparatory to inclusion in an overall project work-activity schedule. This "time-line" provides a ready assessment as to whether or not the evaluation process is planned as a continuous activity rather than a terminal one.

The evaluation plan is to provide for evaluation of objectives-accomplishment at both the operational and at the management levels and, within these levels, for attention to evaluation of both product and process.

It can readily be seen that we expect the program evaluator, or better the program-evaluator team, to possess skills in both of the broad areas of "educational evaluation" and "management-operations analysis". The capability survey discussed previously should give careful consideration to the competency of existing system resources to perform effectively in both areas of a comprehensive evaluation process. The survey should also explore all possibilities for close coordination between the project evaluation process and the more general evaluation activities of the school system, so as to maximize the effectiveness of both. Written commitments establishing this interrelationship should be secured.

It should be apparent by now that we envision evaluation as a fundamental management function, and the evaluator team as an integral part of the project management team. We understand program evaluation as a functional skill, rather than as a program phase. Our approach is intended to be a systems approach, with the evaluation process continuously gathering and analyzing data for reporting through "feedback" or "looping" arrangements to the planning process. No longer is "objectivity" a primary characteristic of the evaluation process (although consistency with reality is much admired). We cannot ask program evaluators to develop the schizophrenia that would be required if they were to be "integral" and "objective" simultaneously. Nor do we want to promote the procrastination, aloofness, ignorance, disinterest, and superficiality that has too often resulted from undue concern for objectivity. Objectivity <u>is</u> a desirable quality in the assessment of program operations; we believe it can more effectively be acquired through an additional program-management activity.

This design may seem to present a large order. It should be pointed out however, that we have been citing <u>essential characteristics</u> or elements of an adequate evaluation design; not the <u>detail</u> required for each element. Detail requirements and the resources to meet them, are a necessary but <u>separate</u> consideration, calling for priority and feasibility "trade-offs" within resource constraints. Program evaluation, in the minds of too many evaluation specialists, is synonymous with controlled variables, matched groups, normal distributions, equidistant-interval measures, inferential statistics, and .01 levels of significance. Unable to attempt the ideal in an area, they often attempt nothing; or deliver after the hour of need has passed. As a result, the project director frequently has no basis for decision-making when, perhaps, it would have been of tremendous value for him to have had some simple "exist - not exist" information.

- Let us now move on to cost-effectiveness. We have chosen to separate cost-effectiveness analysis from comprehensive evaluation for special emphasis, as we did for needs assessment. It logically follows, of course, that indicators of unit objectives-achievement, when coupled with indicators of unit costs, provide us with the basis for cost-effectiveness analysis. We are quick to admit our awareness of the difficulties involved in attributing performance gains to specific project activities or in allocating general costs to those activities. We are approaching this problem through stages of "successive approximation". This year, for example, we are attempting to determine an achievement profile for the cluster of objectives specified for a project component or activity area and to relate this benefit to the full-time-equivalent participant cost associated with total component or activity costs - a relationship of "black boxes", if you will. However, since some of our projects within a given program have similar component/activity objectives, we have a basis for rudimentary comparisons of cost-benefit profiles for different program approaches within comparable environments. In this movement toward definitive cost-effectiveness analyses, the program-evaluator team has a prominent role; in determining the cost-benefit relationships for the project of immediate concern, and in the development of feasible techniques for valid cost-effectiveness analyses in larger-system applications.

- Finally, the program audit. To more effectively monitor the activities of the program-evaluator team and, thus, to act as a performance quality control on the evaluation process, we have developed the concept of the program auditor. The program auditor is expected to bring three major qualities to program operations: objectivity, expertise, and perspective. The ultimate purpose of the program audit is the improvement of program operations through the improvement of program evaluation. More specifically, the program auditor,

through a planned, pre-determined series of activities, highly dependent upon sampling techniques, is to determine the appropriateness of evaluation procedures, in design and in operation, and to verify the results of the evaluation process, thus giving the results an additional measure of credibility. The latter aim is, again, a matter of considerable value to the beleaguered school system in the modern urban complex.

I have briefly discussed several accountability factors with substantial implications for the program-evaluator team. A given factor cannot be considered independent of the others; nor are the factors discrete. They are ordered in what is to us a logical relationship, approximating the sequence in which project planners need give the factors attention. Other arrangements may be more logically organized and, thus, more meaningful to others. We do anticipate changes and refinements in the constitutent elements comprising our accountability model. We do feel, however, that the present model has already demonstrated its effectiveness in bringing into focus those aspects of program design, operation, and management upon which we must all diligently work if we are to achieve greater performance in educational programs, accompanied by a better use of valuable resources.

We have had our share of problems in our efforts <u>re</u> accountability. In fact, we have encountered most of the problems associated with attempts to bring about systemic change; with our own staff as well as with State and local-school-system personnel.

The inertia of rest is a powerful force. A systematic approach to educational program operations, even if its ultimate benefits are visable, requires a persistent effort in <u>advance-planning</u>, <u>precision</u>, and <u>thoroughness</u> far beyond that heretofore found in most educational programs. Many who undertake the challenge grow weary enroute, and find contentment in

pasting new labels on old practices. Many of our Golden Helmets of Mambrino are really shaving basins!

To continue with Don Quixote for a few more moments, I would have to say that many of us have been sent forth by our Lords, in quest of accountability - without a horse or a suit of armor. It is far too easy for upper echelon administrators, in the view from the castle tower, to fix upon the prize and to be oblivious to the resources and support necessary for its attainment. We have recognized this to some extent in our relationship with local educational agencies and now provide developmental grants for projects selected from preliminary-proposal applications, so that necessary technical assistance and supporting services can be available for the development of defensible plans of operation. We have also established budgetary allocations for evaluation in operational grants at the level of 10 percent of total budget, with an additional two percent for program auditing.

We have not, however, made equivalent resource provisions in our own operations. As a consequence, we have program materials available on some accountability factors; nothing on others - leading to an uneven emphasis and implementation of the model to date. In many areas, our public relations efforts have outstripped our program development efforts. Forthcoming developmental contracts will assist in correcting this imbalance.

Accountability is not without its critics - hence the need for a suit of armor. Antagonism toward "thinking through" a new approach to program and project administration is prevelent, as the possibility of change brings a perceived threat to established securities. Often project and program personnel have interests only in general matters of project design or in a narrowly-defined curriculum field, and cannot be "bothered" with those aspects of project management, however vital, for which they have little personal

concern. Others have vested interests which may be endangered by a more open, more coordinated, more interdependent approach to management. Others have legitimate concerns which they are unable to intellectually reconcile with the methodology of accountability - the "there's trouble in the affective domain" syndrome. All of these groups may find it to their advantage, from time to time, to hurl "New Cult of Efficiency" barbs at the proponents of accountability.

The challenge before us is that of demonstrating that accountability can contribute to the fulfillment of all legitimate concerns, that it should expose illegitimate concerns, that it is worth the expenditures of effort required, and that it need not be devoid of humanism. Meanwhile, we dare not promote accountability as a panacea for the many complex problems of American Education. These problems will not be solved by a single-minded approach. Accountability is important, of course, and always has been; although, perhaps, its principles have not fully developed under other designations, e.g., "quality" or "effectiveness". If a new designation will bring strength to needed emphasis, we should welcome a new designation. At the same time, we should not discard, in moments of hysteria occasioned by our anxiety to be rid of public charges of malfeasance as a profession, other valuable concepts, including "innovation", "comprehensiveness", "individualization", "relevance", and "liberation" - else we do a great disservice to our commitment to all that is truly meant by "Education".